

IN THE FIGURES

Replace Figure 8 with the new Figure 8 attached herewith.

REMARKS

Claims 1 to 20 are currently pending. Claims 4 and 6 have been withdrawn from consideration. Claims 1 to 3, 5, 7 and 11 to 13 have been rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 6,181,846 (Pan). Claims 8 to 10 and 14 to 20 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Pan. The drawings have been objected to under 37 CFR 1.84(p)(5) for including reference numerals not mentioned in the description, and for not including reference numeral included in the description. The abstract has been objected to for being too long. The abstract and the disclosure have been objected to for including several informalities.

The claims of the application have been amended to overcome the objections of the Examiner and to better define the invention in light of the prior art. In particular, claims 1 and 14 have been amended to clarify that the paths of the first and second sub-beams leaving the first lens converge, criss-cross and then diverge to the second lens. During this time the sub-beams pass through the variable polarization rotator very close together, if not at the same point, ensuring that the sub-beams will not undergo differing effects caused by the variable polarization rotator, e.g. PDL caused by anisotropy in a liquid crystal cell. The lens 16 in Pan actually causes the sub-beams to diverge towards the liquid crystal cell 18, and accordingly intersect the liquid crystal cell 18 at a point of maximum separation at opposite ends of the liquid crystal cell 18. The paths of the sub-beams do not criss-cross, as in the present invention, but rather the end of the path of the first sub-beam happens to overlap the beginning of the path of the second sub-beam far away from the variable polarization rotator. The Pan reference discloses a folded version of the prior art device illustrated in Figure 1, and does not provide any of the benefits of the present invention, i.e. the ability to pass the sub-beams through the variable polarization rotator close together or at approximately the same point. Moreover, the second lens 16 in the Pan et al reference does not redirect the diverging sub-beams along parallel paths to the polarization beam combiner, but rather converge the widely spread apart sub-beams for recombination.

Claims 2, 3, 4, 8, 15 and 16 have been amended to provide consistent use of the terms "first and second" paths. Claim 21 has been added to ensure all aspects of the invention are protected, and to more clearly define the preferred embodiment of the present invention.

Reinstatement of withdrawn claims 4 and 6 is hereby requested upon allowance of a generic claim 1.

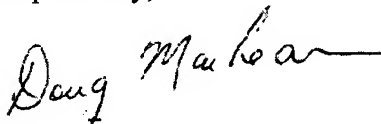
Paragraph 03 of the description has been amended to correct the typographical error therein, and to include reference numerals 34, 35, 40 and 45 used in Figure 1. Typographical errors have also been corrected in paragraphs 7, 28 and 29. The Abstract has been shortened and placed in a more appropriate form. Figure 8 has been amended to include reference numerals 200, 203d, 204d.

As such, it is respectfully submitted that all of the claims remaining in the application are in condition for allowance. Early and favorable consideration would be appreciated. Should any minor informalities need to be addressed, the Examiner is encouraged to contact the undersigned attorney at the telephone number listed below.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees, to Deposit Account No. 50-1465 and please credit any excess fees to such deposit account.

Please associate this application with Customer No: 24949.

Respectfully,



Doug MacLean
Regn No: 48,096

Customer No: 24949
c/o Doug MacLean
Teitelbaum & MacLean
1187 Bank St, Suite 201
Ottawa, Ontario, Canada
K1S 3X7

Tel: (613) 523-3784 Ext. 200
Fax: (613) 523 6799
Email: doug.maclean@jdsu.com
doug@patents.org

DJM/ewg